
UNIVERSITI SAINS MALAYSIA

First Semester Examination
Academic Session 2006/2007

October/November 2006

RPK 334 – Traffic Planning
(Perancangan Lalu Lintas)

Duration : 3 hours
(Masa: 3 jam)

Please check that this examination paper consists of **THREE** printed pages before you begin the examination.

*Sila pastikan bahawa kertas peperiksaan ini mengandungi **TIGA** muka surat yang tercetak sebelum anda memulakan peperiksaan ini.*

Students are allowed to answer all questions either in English OR in Bahasa Malaysia only.

Pelajar dibenarkan menjawab semua soalan dalam Bahasa Inggeris ATAU Bahasa Malaysia sahaja.

Answer **FOUR** questions only. **TWO** questions from **SECTION A** and **TWO** questions from **SECTION B**.

Jawab **EMPAT** soalan sahaja. **DUA** soalan dari **BAHAGIAN A** dan **DUA** soalan dari **BAHAGIAN B**.

...2/-

**SECTION A
(BAHAGIAN A)**

1. Elaborate the purpose of conducting the Origin–Destination survey. There are five methods for conducting the Origin–Destination survey. Please elaborate the best method.

Huraikan tujuan menjalankan kajian Asalan-Tujuan (O – D). Terdapat lima kaedah bagaimana data Asalan-Tujuan dapat dikumpulkan. Sila huraikan kaedah yang terbaik sekali.

(25 marks/markah)

2. There are various types of pedestrian facilities, please elaborate. What do you understand by the technique or policy for pedestrian?

Terdapat pelbagai jenis kemudahan pejalan kaki, tolong huraikan. Apakah yang anda faham dengan teknik atau dasar penyelesaian kemudahan pejalan kaki?

(25 marks/markah)

3. Why it is important to conduct the road safety audit in traffic planning? Please elaborate the study scopes in road safety audit.

Mengapakah kajian audit kemalangan jalan raya itu penting dalam perancangan lalu lintas? Huraikan skop kajian audit keselamatan jalan raya.

(25 marks/markah)

- 3 -

SECTION B
(BAHAGIAN B)

4. There are three techniques used to assign trips to a road network based on the traffic assignment process. Explain each of these techniques below:-

- (a) Diversion Curve Assignment
- (b) All-or-Nothing Assignment
- (c) Capacity Restraint Assignment

(25 marks/markah)

Terdapat tiga teknik penugasan untuk mengagihkan lalu lintas kepada sebuah rangkaian jalanraya menggunakan proses Pengagihan Lalu Lintas. Huraikan setiap teknik di bawah ini:-

- (a) *Penugasan Keluk Lencongan*
- (b) *Penugasan Kesemua atau Tiada*
- (c) *Penugasan Rintangan Muatan*

(25 marks/markah)

5. In his book *Transport Planning and Traffic Engineering*, C.A. O'Flaherty listed six methods on how landuse control can be utilised to manage traffic development. Briefly describe each of the methods.

Di dalam bukunya, Transport Planning and Traffic Engineering, C.A. O'Flaherty telah mengemukakan enam kaedah bagaimana kawalan gunatanah boleh digunakan untuk mengurus pembangunan lalu lintas. Secara ringkasnya, terangkan kaedah-kaedah tersebut.

(25 marks/markah)

6. What is an intelligent transportation system and describe it's main characteristics.

Apakah yang dimaksudkan dengan 'Sistem Pengangkutan Pintar' dan huraikan ciri-ciri utama sistem tersebut.

(25 marks/markah)

-ooo 0 ooo-